**1999 - 2000**

# Annual Report

**Safety Code Services**

101-04828/

## Introduction

Safety Code Services (SCS) is a Special Operating Agency (SOA) responsible for regulating the safe design, fabrication, installation and operation of electrical, plumbing, propane, natural and medical gas systems, boilers, pressure vessels, elevating devices and amusement rides.

SCS became an SOA in 1997 in response to stakeholder demands for increased service, a desire by government to improve the enforcement of safety regulations and a willingness by stakeholders to fund increased services directly through inspection fees.

Fiscal 1999/2000 marks the final year of a three (3) year transition plan to reach cost recovery. During the year SCS continued to focus on meeting financial targets and delivering services according to approved performance standards.

Activities were also carried out in support of the key result areas of safety, rationalizing regulations, stakeholder participation and delivering a quality efficient service.

## Safety

An effective safety system requires that codes and standards are maintained up to date, that inspectors are technically competent to enforce those standards and that there are sufficient resources to carry out compliance monitoring and enforcement activities.

Codes affecting elevating devices and plumbing systems were updated in 1999/2000. Supplement No.1 to the 1994 CSA-B44 Safety Code for Elevators was adopted. The Supplement introduced new space requirements for elevator pits to improve the safety of persons performing maintenance and repair work as well as adding new safety features for escalator control circuits.

The National Plumbing Code was also amended for New Brunswick to require temperature safety relief valves to be installed on all water heater installations in the province.

Training for SCS staff continued to be a priority in 1999/2000. Inspectors attended computer training, train the trainer courses and Canadian Standards Association training on fire investigations. Plumbing inspectors took training in cross connection control and were certified by the New England Water Works Association as Cross Connection Control Surveyors.

In addition two elevator inspectors received training in amusement ride inspections and were certified by the National Association of Amusement Ride Safety Officials.

In the area of inspection coverage, SCS managed to meet or exceed approved performance targets set for 1999/2000. This included responding to a significant increase in demand for Boiler and Pressure Vessel inspections at the Irving Refinery project. (See performance review for statistics)

## Rationalizing Regulations

SCS continued a process of reviewing regulations and developing proposals to eliminate unnecessary red tape.

The qualification and licensing system for pressure welders was streamlined to speed up the testing and licensing of welders needed for the Irving Refinery project. This included creating new standardized licences to eliminate the need for special tests.

A proposal to overhaul the gas licencing system resulted in the drafting of new regulations. The new system will allow persons to work in both propane and natural gas with a single licence. The upgrade training for natural gas is based on national programs which will facilitate the recognition of New Brunswick licences in other jurisdictions.

A proposal to simplify the permit process and reduce the fees associated with emergency electrical repairs was also developed in 1999/2000 and is expected to simplify regulations in that area.

Boiler and Pressure Vessel regulations were also updated to modernize the designation of the stationary engineer occupation to the nationally recognized power engineer designation.

## Stakeholder Participation

The active participation of stakeholders in SCS activities is important to ensure services are kept current and relevant.

The Gas Board, Power Engineers Board and the four (4) Safety Advisory Committees representing more than thirty (30) interest groups met a total of twelve (12) times during 1999/2000.

A wide variety of issues were discussed and recommendations made affecting owner/operator log books and amusement ride inspections, elevator maintenance licences, elevator door lock standards, electric sign standards, licensing for communication wiring, permits for emergency electrical repairs, electrical maintenance permits, plan review fees, accident and incident tracking, water heater standards, cross connection control standards, water conditioner installations, single entry point permits, welding licences, residential gas inspections, BPV contract inspections for Lepreau, and BPV ASME Authorized Inspection Agency inspections.

Some of these recommendations have already been implemented while others are in various stages of resolution.

## Quality, Efficient Service

In addition to performance standards for inspection coverage, SCS is also accountable to meet quality service standards covering response times for service requests. (see below)

An internal audit for 1999/2000 revealed that services were generally being delivered in compliance with these standards.

One area of exception was the review of QA manuals which on occasion exceeded the review time standard. This was most often due to available technical staff being reassigned to major project sites which was necessary to prevent construction delays.

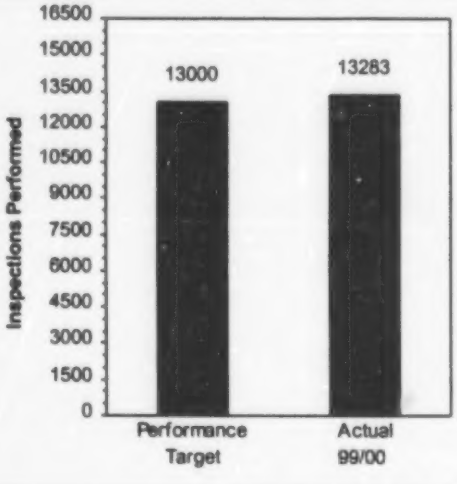
| Function | Electrical | Plumbing | BPV | Elevator |
|---|---|---|---|---|
| Plan Review | Reviewed within 5 working days of receipt. | Reviewed within 5 working days of receipt. | Reviewed within 10 working days of receipt. | Reviewed within 5 working days of receipt. |
| Design Registration | N\A | N\A | Registered within 2 working days of receipt of approved design. | N\A |
| QA Manuals | N\A | N\A | Manual reviewed within 10 working days of receipt of application. | N\A |
| SE/Gas Exams | N\A | N\A | Conducted within 45 working days of receipt of application. | N\A |
| Special Welder Test<br><br>Standard Welder Test | N\A | N\A | Conducted within 5 working days of receipt of application.<br><br>Conducted within 30 working days of receipt of application. | N\A |
| Installation Permits | Issued within 1 working day of receipt of application or completion of plan approval. | Issued within 1 working day of receipt of application or completion of plan approval. | Issued within 1 working day of receipt of application or completion of plan approval. | Issued within 1 working day of receipt of approved plans. |
| Operating Permits | N\A | N\A | (a) Issued within 24 hours of final inspection.<br><br>(b) Renewed within 3 working days of receipt of application. | (a) Issued within 24 hours of final inspection.<br><br>(b) Renewed within 3 working days of receipt of application. |
| Licenses | Issued within 3 working days of receipt of application. | Issued within 3 working days of receipt of application. | Issued within 3 working days of receipt of application. | Issued within 3 working days of receipt of application. |
| Request for Inspector | Call returned within 1 working day of receipt. | Call returned within 1 working day of receipt. | Call returned within 1 working day of receipt. | Call returned within 1 working day of receipt. |

## Performance Review

In return for SOA operating flexibilities the agency is accountable to deliver services according to approved service standards. SCS has met or exceeded inspection targets set for 1999/2000.

Following is a summary of agency performance in eight (8) inspection areas and a statistical summary of services delivered.

### ELECTRICAL INSPECTIONS

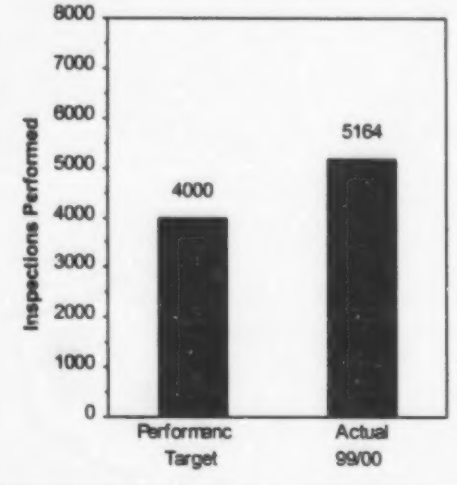



**TARGET: 13,000 Inspections according to risk assessment**

**ACHIEVED: 13,283 Inspections**

2,217 inspections were by plumbing inspectors qualified as residential electrical inspectors.

### PLUMBING INSPECTIONS

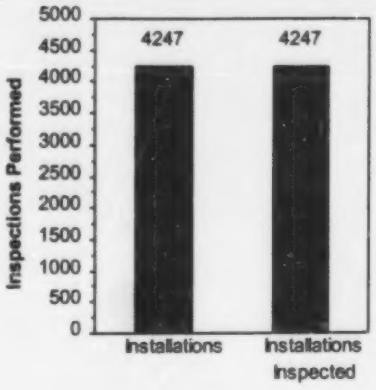



**TARGET: 4,000 Inspections according to risk assessment**

**ACHIEVED: 5,164 Inspections**

1,019 inspections were by electrical inspectors qualified as residential plumbing inspectors.

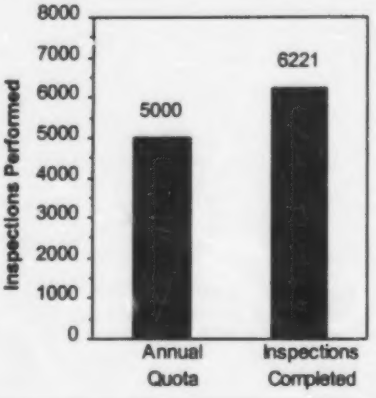
## BOILER AND PRESSURE VESSEL INSPECTIONS




**TARGET:** **100% coverage of new or altered boiler and pressure vessel installations inspected before going into service**

**ACHIEVED:** **100% coverage**

This represents a 45% increase over the previous year.

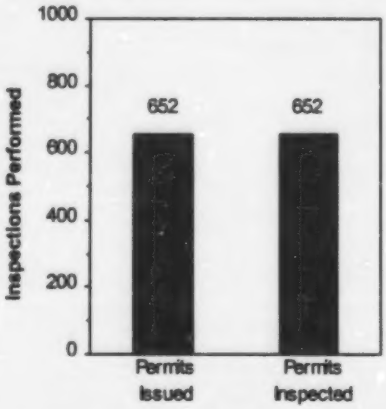



**TARGET:** **In-Service inspections according to schedule**

**ACHIEVED:** **100% coverage**

There are approximately 16,000 registered devices requiring about 5,000 inspections per year to meet the inspection schedule.

A previous backlog of over 8,000 devices outstanding in 1997 has been reduced to less than 1,500 in 1999/2000.

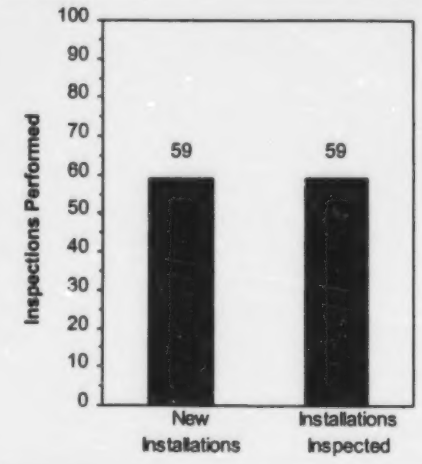



**TARGET:** **100% coverage of new/altered propane installations inspected before going into service**

**ACHIEVED:** **100% coverage**

The 100% coverage was achieved through a combination of SCS inspections and industry based inspection programs. SCS increased its participation rate from132 inspections last year to 703 in 1999/2000.

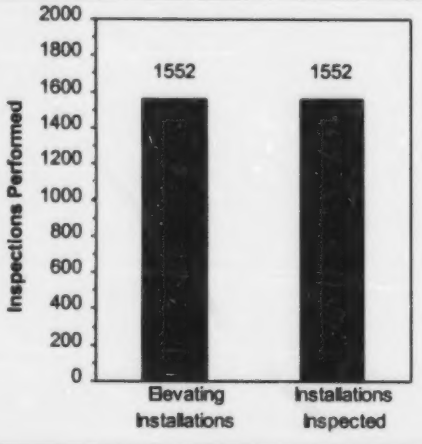
## ELEVATOR INSPECTIONS




**TARGET:** **100% coverage of all new elevating devices and amusement rides inspected before going into service**

**ACHIEVED: 100% coverage**

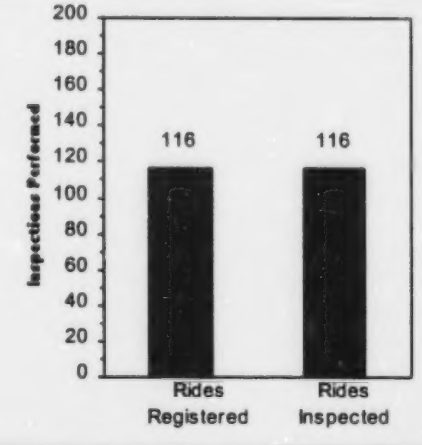
There were 59 new elevating devices installed in New Brunswick during 1999/2000.




**TARGET:** **100% coverage of annual inspections of elevating devices**

**ACHIEVED: 100% coverage**

There were 1,552 registered elevating devices operating in NB in 1999/2000.




**TARGET:** **100% coverage of annual inspections of amusement rides**

**ACHIEVED: 100% coverage**

There were 116 amusement rides registered in New Brunswick last year.

# SAFETY CODE SERVICES

## Statistical Summary of Services
## 1999/2000

| | |
|---|---|
| **Inspections Carried Out** | |
| Amusement Devices | 142 |
| Boiler and Pressure Vessel | 10,641 |
| Electrical | 13,283 |
| Elevators | 1,854 |
| Gas | 703 |
| Plumbing | 5,164 |
| **TOTAL** | **31,787** |
| **Plans Reviewed or Registered** | |
| Boiler and Pressure Vessel | 1,499 |
| Electrical | 354 |
| Elevators | 59 |
| Gas | 65 |
| Plumbing | 44 |
| Welding Procedures | 190 |
| Quality Management Plan | 22 |
| **TOTAL** | **2,233** |
| **Installation Permits Issued** | |
| Electrical | 11,958 |
| Elevator | 59 |
| Plumbing | 2,767 |
| Gas | 652 |
| **TOTAL** | **15,436** |
| **Licenses Issued or Renewed** | |
| Electrician | 2,435 |
| Electrical Contractor | 751 |
| Plumbers | 551 |
| Plumbing Contractor | 362 |
| Compressed Gas | 1,863 |
| Power Engineer | 2,008 |
| Steamfitter-Pipefitter | 1,060 |
| Welder | 4,277 |
| Plant Permits | 224 |
| **TOTAL** | **13,531** |
| **Operating Permits** | |
| Elevating Device | 1,537 |
| Boiler and Pressure Vessel Registration | 16,009 |
| Amusement Devices Registration | 116 |
| **TOTAL** | **17,662** |
| **Exams/Tests Conducted** | |
| Gas Exams | 106 |
| Power Engineer Exams | 492 |
| Welders Tested | 2,370 |
| Plumbing Contractors | 10 |
| **TOTAL** | **2,978** |

## Financial Performance

Fiscal 1999/2000 represents the final year of a three (3) year plan initiated to convert Safety Code Services to a cost recovered SOA.

Over the three (3) year period, inspection revenues have progressively replaced the departmental operating grant, which initially stood at $500,000.

As planned, the departmental operating grant was eliminated in 1999/2000.

The SOA did receive separate funding from government in 1999/2000. This was to cover central salary increases that were not included in the initial three (3) year business plan.

SCS had an operating surplus of $549,400 in 1999/2000. The surplus is primarily the result of increased design registrations, licences and inspection activity associated with the Irving Refinery.

As set out in the SOA agreement this surplus will be retained and carried forward by the SOA for future use.

**1999/2000 FINANCIAL REPORT**
**($000's)**

| | |
|---|---|
| **REVENUE** | |
| Fees | |
| Electrical | 1,387.9 |
| Plumbing | 512.6 |
| Boiler/Pressure Vessel | 1,407.3 |
| Elevator | 388.0 |
| Central Salary | 105.6 |
| Other | 12.8 |
| **Total Revenues** | **3,814.2** |
| **EXPENDITURES** | |
| Primary 3 - Personal Services | 2,624.2 |
| Primary 4 - Other Services | 414.9 |
| Primary 5 - Materials/Supplies | 78.4 |
| Primary 6 - Property/Equipment | 136.6 |
| Primary 7 – Grants | 2.4 |
| Primary 8 - Other Charges | 8.3 |
| **Total Expenditures** | **3,264.8** |
| **Revenue Surplus** | **549.4** |